

REMARKS

Claims 2, 3 and 10 have been amended. Claims 1, 9 and 12-13 have been canceled. Reexamination and reconsideration are respectfully requested.

In the Office Action, claims 1-6 and 9-13 were rejected as being anticipated by Takeuchi (U.S. 5,602,565). Applicants respectfully traverse this rejection.

In general, Applicants describe the use of a display superimposer that controls the superimposition of the displays by various OSs. An input device determines the operating system to which an input event of a user input is to be transferred in accordance with the position on the display and the superimposing mode utilized. For example, the input device can determine the operating system to which an input event of a user input is transferred in accordance with the color distribution ratio on the display.

Applicants have amended claim 10 to now recite a display apparatus where the results of processing by a plurality of operating systems are displayed on the same display unit. In addition to a memory and a display environment changer, the claimed display apparatus includes a display superimposer which displays the priority of frames in a state of being superimposed on each other. An input device is provided which receives a user input. As to one display area on a display unit at which the plurality of frames are superimposed, the input device determines further display areas, within the one display area utilized by the plurality of operating systems, with reference to a position on the display unit at which the user input is performed and a superimposing mode of the plurality of frames. The input device transfers an input event of the user input to one of the operating systems which displays at the position.

By way of example only, and not as a limitation on the scope of the claims, Figures 12-15 disclose the use of a disposed superimposer 501 in conjunction with an input device 1201 (page 24, lines 3-9). As shown in the illustrations of Figure 14, the display superimposer 501 can display graphics-drawing frames and user input buttons on each other on the same display (see the graphic map frames and buttons 1402 shown on display 1401 in Figure 14a; see page 25, lines 6-12). The input device determines or judges to which operating system the button is to be effective based on the position at which the user has performed the input and the superimposing mode (see page 24, line 25-page 25, line 3 and page 25, lines 9-16).

By contrast, in a typical Windows system, or in the teachings of the cited references, an input to a display area to be displayed in a superimposed manner is performed by transferring the input event to a program or an operating system, which then outputs a processing result to the display area displayed in the foreground (or determined in advance to receive such an input). Thus, the input to the display in the prior art is quite limited.

In general, in Applicants' invention, the management of the superimposition of the display areas on the display contributes directly to the management of the display input, so that each software application or operating system can perform input display processing without factoring the other software applications or operating systems into consideration. That is, an input to the display areas, on which the processing results of plural operating systems are displayed in a superimposed manner, is shared by the operating systems, respectively.

In contrast, Takeuchi merely provides a video display apparatus which can display overlapping video images without transferring video data among the video memories. As shown in Figure 3A of Takeuchi, different operating systems are known to control individual memory units (column 6, lines 59-64). While Takeuchi does disclose output images from different operating systems being superimposed as shown in Figure 3B for example, nowhere does Takeuchi disclose or suggest the use of an input device to determine further display areas, within one display area utilized by the plurality of operating systems, with reference to a position on the display unit at which the user input is performed and a superimposing mode of the plurality of frames, in order to transfer an input event of the user input to one of the operating systems which displays at the position.

As noted above, Applicants' invention essentially utilizes the management of the superimposition of the display areas to contribute directly to the management of the display input so that each software or operating system can perform the input display processing without taking the other software application or operating system into consideration. In essence, this allows the input to the display areas, on which display areas the processing results of several operating systems are displayed in a superimposed manner, to be shared by the operating systems, respectively. Takeuchi neither discloses, suggests or even hints at such a novel display apparatus. Rather, as noted at the outset, Takeuchi is merely concerned with overlapping video images without requiring video data transfer among the video memories. (See Abstract).

Indeed, Takeuchi discloses providing a keyboard 40 or mouse 42 only for the user to input a switching instruction between the operating systems (see column 7, lines 2-6). Takeuchi does not associate such a user input with a position on the display at which the user input is performed and a superimposing mode of the plurality of frames, in order to transfer an input event of the user input to one of the operating systems, as in Applicants' invention.

In view of the above, Applicants respectfully submit claim 10 is patentable over Takeuchi.

Further, Applicants have amended claims 2 and 3 to now depend from claim 10. These claims specify the function of the display environment changer to set color palettes that are different from each other in correspondence with the plurality of operating systems (claim 2) and color modes that are different from each other in correspondence with the plurality of operating systems (claim 3).

Neither Takeuchi, nor any of the other cited references, discuss such a display environment changer that sets color palettes and color modes. Indeed, the Examiner's reference to Takeuchi's control of signals based on the data of the storage unit 60 when a screen size is changed, is not at all applicable to Applicants' claimed color palettes and color modes. Rather, Takeuchi merely describes different video memories that correspond to differently sized display screens (see column 6, lines 33-53). Accordingly, Applicants submit dependent claims 2 and 3 are separately patentable over Takeuchi.

Applicants' independent claim 4 likewise describes a display apparatus having a display superimposer which displays a plurality of frames in a state of being superimposed on each other. The display superimposer superimposes the

plurality of frames in a manner that a frame expanded and displayed by either of the plural operating systems is set in a background and an operating system is set in a foreground. The operating system set in the foreground is different from the operating system set in the background. Additionally, a display environment changer is provided to change the display environments to be set in correspondence with the plurality of operating systems.

Applicants respectfully submit independent claim 4 is also patentable over Takeuchi.

Further, claims 5 and 6 depend from claim 4 and recite the color palettes and color modes as discussed above with respect to dependent claims 2 and 3. Accordingly, these claims are also submitted to be patentable.

Finally, Applicants' dependent claim 7 recites that the display superimposer sets a specified color of the foreground to be a transmission color, and then superimposes the foreground on the background.

Takeuchi does not teach or suggest this feature. Nor, for that matter, does Bodin render obvious this feature.

Bodin appears to disclose that, as to an image output from an application on a virtual DOS machine, color palette information is provided in the environment of the virtual DOS machine. When an application is switched, the color palette information is saved and another palette information that was saved is read (see Fig. 2). In contrast, Bodin does not disclose or suggest the utilization of a transmission color as recited in Applicants' dependent claim 7. Hence, Applicants submit claim 7 is separately patentable over Takeuchi in view of Bodin.

Finally, Applicants' dependent claim 8 recites that the display superimposer has a superimposition display color determining table. Superimposing a foreground on a background is performed in accordance with the table.

For the reasons discussed above with respect to Takeuchi and Bodin, Applicants respectfully submit claim 8 is separately patentable.


For the foregoing reasons, Applicants respectfully submit claims 2-7, 10-11 and 14 are now in condition for allowance. An early Notice to that effect is solicited.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket No. 056203.49277US).

Respectfully submitted,

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